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ORIGINAL ARTICLES.

A REPORT OF CASES OF BELL'S-PALSY AND
EPILEPSY, CURED BY THE CORRECTION
OF AMETROPIA AND HETEROPHORIA.¹

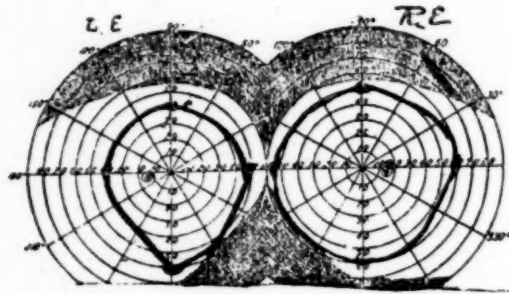
BY L. R. CULBERTSON, M.D., ZANESVILLE, OHIO,

OCULIST TO U. S. PENSION BUREAU; C. & M. V.; B. Z. & C. RYS.; CITY HOSPITAL, ETC.

CASE I.—Mr. G. H. B., referred to me by Dr. W. C. Frew, of Coshocton, Ohio, aged 22 years, consulted me April 4, 1898. Strong and robust; family history good; no syphilis, hereditary or acquired; no epilepsy or rheumatism. Has had typhoid fever three times, the last time five years ago, but it did not leave any sequelæ. He says that several weeks since, when the palsy (Bell's) came on, his face was swollen and sore and the left side of his face was numb. His face was not red. He did not have any soreness or numbness of any other part of the body except the tongue, the left side of which was numb. He also had difficulty in speech, *i. e.*, difficulty in saying what he wished to. When the attack came on he had great and very sharp pains in the eyes which had to be relieved by morphine. His mouth is drawn to one side. There was no hemianopsia during the attack, nor ringing in the left ear. T. both +. He says that when he sings his voice "sounds like a cym-

¹Read by title at the Fourth Annual Meeting of the Western Ophthalmological and Oto-Laryngological Association, held at New Orleans, La., February 10-11, 1899.

bal." (This is due to involvement of the tensor tympani). He is married, and not hysterical. At times he can not hear so well with left ear. Fork tests: examination of ear and throat show H. normal. (This symptom of difficulty in hearing without any disease of the ears is due to a too great tension of drum caused by overaction of the tensor tympani and is quite a frequent symptom of heterophoria). No anæsthesia. No hemianopsia. Color-vision and color-fields normal. He smokes from five to ten cigars a day. Consensual and direct light reflexes normal. His mouth is drawn to the right and he can not close the left eye.



Ophthalmoscopic examination: R. E., veins very large and tortuous and arteries somewhat diminished in size. Slight papillitis. Disc pale and slightly cupped. R. E., veins very large and tortuous; disc quite hazy from papillitis, pale, and shows marked cupping.

Muscle tests: R. H., $\frac{1}{2}^{\circ}$. Esophoria, 1° . Esophoria in acc. $2\frac{1}{4}^{\circ}$. Abduction, 2° ; Add., 20° . R. Sur., 3° ; L. S., $2\frac{1}{2}^{\circ}$.

Retinoscopy shows (atropia) $+2.75$ s. $\ominus - 25$ cyl. 180° each eye. I gave for distance R., $+1.5$ s. $\ominus - 25$ cyl. 180° ; L., $+1.25$ s. $\ominus - 25$ cyl. 180° . For near vision I gave R., $+2.25$ s. $\ominus - 25$ cyl. $180^{\circ} \ominus 1^{\circ}$ prism base in; L., $+2$ s. $\ominus - 25$ cyl. $180^{\circ} \ominus 1^{\circ}$ prism base in. A solution of salicylate of atropine grs. vj to $\mathfrak{J}j$ was used for twenty-four hours, but the accommodation was not entirely suspended.

September 24, 1898. Abd., 7° ; Add., 20° . R. S., 2° ; L. S., 2° . Retinoscopy and atropia gave the same results. I will have him wear the same glasses but leave off the prisms. The facial paralysis has entirely disappeared.

CASE II.—Mr. F. G., aged 32 years, referred to me by Dr.

C. O. Dunlap. Has been a sufferer from epilepsy, both *petit* and *grand mal* for five years. He says that at times his muscles swell into knots; he also has difficulty in speech and his tongue becomes so swollen that he can scarcely speak and the swelling is so great that the teeth leave their imprint on the tongue. (This is true as I found when examining the tongue while it was in this condition). Dr. Dunlap states that at times the sphincter ani can only be dilated when the utmost force is exerted on the speculum. His digestion is bad and he has frequent bilious attacks. He does not sleep well; has taken a great deal of bromide, and has a constant ringing in the left ear. Hearing is normal and there is no disease of ears. The tubes are open. There is some chronic pharyngitis (probably a reflex disturbance from the eye strain).

Ophthalmoscopic examination: R. E., arteries too fine, veins enlarged; disc normal. L. E., arteries quite fine and have a peculiar glistening appearance, due to lack of blood in them consequent upon the arterial tension of epilepsy; veins enlarged; disc normal. Esophoria, 2° . R. H., 3° . Adduction (under mydriatic), 25° . I had him use atropine sulph. sol., grs. viij to 3j for a week. Then retinoscopy gave $+1.75$ sp. each. Under the mydriatic he only accepted $+1$ sp. which gave $V_2 = \frac{6}{VI}$. Without the mydriatic $+1.25$ sp. $= \frac{6}{XII} V_2$. I had him continue the atropia for several weeks and exercised the adduction under mydriatic. Then I stopped atropia and continued the exercise which was carried to 45° and then stopped. As he still had 3° R. H., I combined 1° prism with bases up and down respectively before each eye combined with the spherical correction. A month later the prisms were dispensed with, as the hyperphoria had disappeared. The ringing in the ear had also ceased, the bowels were regular, the appetite good, and he slept well. For ten months he did not have any epileptic fits, then they returned.

December 18, 1897. Esophoria, 6° ; abduction, 0° ; add., 12° . December 23. I performed tenotomy of the right int. rectus.

January 10, 1898. Adduction, 30° ; abd., 6° . January 11. I divided left int. rectus. January 22. Adduction, 39° . Exercise continued.

February 12. Adduction, 36° ; abd., 8° . R. S., $2\frac{1}{2}^{\circ}$; L. S., $2\frac{1}{2}^{\circ}$. Patient has had no epileptic fits since then. His health

is greatly improved, and he has no more swelling of the tongue, but still has constipation, and piles.

In April, 1898, molten iron was blown on conjunctiva of right eye. The wound healed without adhesions, save in lower cul-de-sac, but this did not interfere with the motions of the eyeball. Then he had erysipelas in the eye, but recovered with a posterior synechia and a lens slightly opaque.

REMARKS.

CASE I.—The irritation of the retina caused by ametropia and heterophoria was one factor in the causation of the paralysis, *i. e.*, the irritation was carried through the optic nerves and from thence reflected into the centers of the fifth and seventh nerves. Then the strain on the third nerve was reflected into the fifth and seventh. The implication of the fifth nerve produced the following symptoms: Numbness of the face and half of the tongue; intensity of hearing (motor branch of fifth through otic ganglion); tensor palati (through otic ganglion); dryness of half of the tongue (from involvement of chorda tympani); glaucoma from irritation of branch going to ophthalmic ganglion and ciliary nerves. The involvement of the facial nerve caused paralysis of the muscles of one side of the face and of the stapedius muscle, causing difficulty in hearing.

Gellé says (*Annals des Maladies de l'Oreille*, November, 1890), that in cases of complete paralysis of the facial nerve the tympanic muscles still act, though they lose some of their power of co-ordination. The difficulty in speech was also due to the involvement of the facial nerve.

CASES FROM THE CLINIC.

BY HENRY DICKSON BRUNS, M.D., NEW ORLEANS, LA.,

PROFESSOR OF DISEASES OF THE EYE, NEW ORLEANS POLYCLINIC—SURGEON-IN-CHARGE OF THE EYE DEPARTMENT, EYE, EAR, NOSE AND THROAT HOSPITAL, NEW ORLEANS, LOUISIANA.

A MICROPHthalmic FAMILY.

On July 11, 1898, a pair of poor country people came to the clinic bringing their two little children and seeking to know if anything could be done for them. The elder of the children was a little girl of 5 years, the other a baby boy of 5 months.

Both children were of fair complexion, well-nourished, and of good size for their ages. The eyelids in both patients were closed and deeply sunken into the orbits, and I did not fail to jump at the conclusion that we were about to be presented with another shocking example of atrophy of the globes in two members of one family, as the horrible result of neglected ophthalmia neonatorum. Upon drawing the lids apart the true condition was readily recognized. The two cases were similar in all respects; the four orbits contained four little shrunken globes not larger than very small green peas, or half as large as ordinarily good-sized peas. On each globe was a miniature cornea through which a dark-bluish iris could be partially seen and through pupils the size of pinheads we thought to discern chalky-white and opaque lenses. In none of the orbits could a trace of any other globe, sac or swelling be discovered. The parents stated that the condition had existed from birth (as, indeed, was easily to be seen), and the mother added the surprising information that out of seven children she had born, three had been born with just such "bad eyes." Thus, the first had "good eyes," the second good eyes, the third (the little girl before us) bad eyes, the fourth (still-born) unknown, the fifth bad eyes, the sixth good eyes, and the seventh, the five-months-old baby, bad eyes. The six children were alive and in good health. Such a history naturally led to inquiries into the family and personal histories of the mother and father. In neither case was there any ancestral history of eye disease. The father is a tall, stoop-shouldered young farmer of about 35 years of age, a brownish blond with blue eyes, healthy-looking, and asserting that he has never been ill; his vision = $\frac{20}{xx}$ o. u. The mother is rather short, square, and with stout limbs; a pronounced blonde with clear blue eyes; somewhat chlorotic in appearance. She has the dull, patient, mild, bovine nature and intelligence of a thorough bucolic, and it is difficult to elicit an account of herself. She makes it clear, however, that her general health has been very good, though she has been a terrible sufferer from headaches, but speaks in an obscure way of "fainting spells," with loss of consciousness, that makes me think something of epilepsy, something of hysteria; though from her general appearance, manner, and conversation, I incline to the former. She is 30 years of age, and vision is only $\frac{20}{xl}$ o. u. A most careful examination (under atropine) shows

nothing abnormal in the media or the eye-grounds, but a refractive defect, corrected by the following: R. E., + 0.50 c. ax. 15° — 0.50 c. ax. 105° ; L. E., + 0.50 c. ax. 165° — 0.50 c. ax. 75° , which was ordered for constant wear. Can we suppose that the lack of ocular development manifested in the mother by a degree of regular mixed astigmatism was reflected upon the children as complete microphthalmos?

It was, of course, not to be determined in children so young whether there was any light perception. The father thinks that the little girl can perceive light; he has often noticed the child raising the lids with the fingers as though attempting to see, but this trick is frequently observed in blind children in whom the lids are habitually closed.

GLAUCOMA AFTER CATARACT EXTRACTION; ANTERIOR SCLEROTOMIES; RECOVERY.

A white woman, of German descent, 73 years of age, came to the hospital June 16, 1896. Considering the age, her general health and appearance are good. Eight years ago she had some trouble with right eye. The history concerning the left eye is indefinite. V., R. E. = l. p., L. E. = fingers at six feet. Diagnosis: Right eye, cataract, senile, mature; left eye, cataract, senile, immature.

June 24, 1896. Right eye, extraction without iridectomy, under cocaine, without accident. June 26. Bandage removed, anterior chamber closed, atropine t. i. d.

July 6, 1896. Pupil dilated and nearly round; doing well. July 17. Doing well; a trace of injection.

August 21, 1896. Ciliary injection; iris discolored. August 24. Intense ciliary injection, frontal pain, ordered atropine every three hours. August 28. Ciliary injection greatly diminished; pupil dilated and round.

September 28, 1896. Ciliary injection gone. R. E., with + 10 s. \subset + 3 c. ax. 120° , V. = $\frac{20}{xxx}$.

October 21, 1896. Left eye, extraction without iridectomy, under cocaine, without accident. October 26. Bandage removed; wound healed, no pain; cortical masses in the anterior chamber. October 28. Intense iritis and œdema of bulbar conjunctiva. Atropine six times daily.

November 1, 1896. Injection still intense; pupil not di-

lated. November 9. Ciliary injection less intense, but pupil closed.

December 23, 1896. Left eye, iridotomy under cocaine; good coloboma.

January 15, 1897. No reaction; cornea cloudy.

February 25, 1897. Cornea clearing; atropine.

March 8, 1897. L. E., T. = + 2. March 10. Left eye, anterior sclerotomy under cocaine. March 12. L. E., T. —; eserine t. i. d. March 26. L. E., T. = + 1; eserine six times a day. March 28. L. E., Tn.

April 12, 1897. L. E., Tn.

May 3, 1897. L. E., + 9 s. \bigcirc + 3.5 c. ax. 180° , V. = $^{20}/L$.

September 29, 1897. L. E., T. = + 1; anterior sclerotomy under cocaine.

October 11, 1897. L. E., Tn. Vision with above glasses, R. E. = $^{20}/xxx$, L. E. = $^{20}/L$.

A CASE OF XEROSIS OF THE CORNEA; HEMERALOPIA AND BLEEDING FROM THE GUMS.

A mulatto boy, 10 years of age, came to the clinic on June 28, 1898. He complains that his "eyes have been weak and almost blind at night for about a year." The patient is rather stout for his years and looks well-nourished but anæmic. His parents state that he bleeds quite freely from the gums nearly every night and the gums are pale and spongy-looking. V. = $^{20}/xx$ o. u. The portion of the bulbar conjunctiva exposed in the palpebral opening presents the well-known dark, silky appearance; is not moistened by the tears and is covered with fine foam. The hemeralopia is pronounced enough seriously to interfere with movements after sunset. The boy was placed in the care of Dr. E. A. Robin, the first assistant surgeon of this department, who put him on "mercauro," 5 drops, in water, three times daily, and advised that he be given plenty of fresh vegetables and fruit, especially apples.

July 27, 1898. The general appearance is much improved; weight 70 pounds.

August 28, 1898. Continued improvement in general appearance of patient; weight 70 pounds; the gums have ceased to bleed; V. = $^{20}/xx$ o. u. After this the patient failed to visit the clinic.

All cases of this condition seen at my clinic have been in persons of negro blood. I have not seen bleeding from the gums as a symptom; and this, together with the fact elicited by inquiry, that our patient had been living largely upon salt meat and Irish potatoes, confirms the view that in conjunctival xerosis with hemeralopia we are dealing with symptoms dependent upon some general vice of nutrition.

TWO CASES OF DISCISSION OF THE LENS IN HIGH MYOPIA.

CASE I.—A white married woman, 21 years of age, red-haired, blue-eyed, florid, large, and of good general appearance and health. March 16, 1897. Patient complains that right eye has been troublesome for three or more weeks. From her description and the appearance of the eye she has had attacks of ciliary irritation and hyperæmia, with tenderness and pain. Vision, R. E. = $\frac{20}{6}$, L. E. = $\frac{20}{LXX}$; there is now ciliary injection of right eye. Atropine is instilled in both eyes, and the ophthalmoscope shows in right eye high myopia, a myopic staphyloma to the temporal side of the disc, and atrophy and irregular distribution of the choroidal pigment. Left eye is myopic but otherwise normal. The refraction, under atropine, is found to be: R. E., — 16 s. \bigcirc — 3 c. ax. 15° = $\frac{20}{LXX}$; L. E., — 3 c. ax. 165° = $\frac{20}{XX}$. Discission of the lens of right eye was advised.

March 24, 1897. A moderate discission of the lens capsule was made under cocaine by Dr. Robin, the first assistant surgeon of this department. Atropine instilled.

March 25, 1897. Eye looks well; little reaction; no pain. Pupil kept dilated with atropine.

April 7, 1897. Under cocaine, Dr. Robin broke up lens thoroughly with knife kneedle. Atropine every three hours.

April 9. Some ciliary injection, no pain, no tension. Atropine continued.

May 7, 1897. Eye free from irritation; lens thoroughly broken up and being absorbed slowly. Atropine continued.

June 2, 1897. Patient can see to count fingers with right eye. Another thorough discission. June 5. No reaction. Continued atropine.

July 6, 1897. All cortical substance absorbed, some capsule remaining in pupil. Vision, R. E. = $\frac{20}{60}$. July 7. An incision was made in corneal margin with keratome and the

capsule removed with forceps. Slight escape of vitreous. Atropine and a pressure bandage. July 9. Wound healed; some reaction. Atropine every four hours and hot water bathing. July 14. Very little injection remaining; no pain. July 19. Eye looks well. Vision with + 1 s. = $\frac{20}{LXX}$.

December 14, 1897. Vision, R. E. = $\frac{20}{C}$, L. E. $\frac{20}{XX}$ doubtfully. Right eye, no redness; pupil oval, with long diameter horizontal. Javal shows:

R. E., 3.50 D. ax. $\frac{105^\circ}{15^\circ}$ L. E., 3 D. ax. $\frac{75^\circ}{165^\circ}$

R. E., + 3 c. ax. $105^\circ = \frac{20}{L}$, L. E., - 1.50 c. ax. $165^\circ = \frac{20}{XX}$, and the patient is discharged improved.

December 20, 1898, more than a year after the operation, the patient was seen again. The right eye looks the same; there is no injection; the eye has not become more enlarged or prominent; the pupil is black and oval in shape; there is no pain or tenderness nor has there been since she was discharged a year ago. Vision, R. E. = $\frac{20}{CC}$; + 3 c. ax. $105^\circ = \frac{20}{LXX}$, practically the same as it was upon discharge, making allowance for difference of place and illumination. There is slight ex- and hypophoria. An ophthalmoscopic examination shows the media clear and the choroid and the staphyloma about as media they were a year ago.

This patient seems to me to have been benefited decidedly. In the first place, at the expense of a simple and but slightly painful operation, she has been entirely relieved of the recurring attacks of pain with injection in the right eye, a condition that was greatly incapacitating her and rendering existence more or less miserable at the time she applied for relief. It is impossible, moreover, to foretell to how evil a state, to what pain and loss of time this progressive myopia with recurring ciliary hyperæmia might finally have led. In the second place, the entire relief of the right eye has greatly improved the vision of the left, it has mounted from $\frac{20}{LXX}$ without a glass when first seen in December, 1897, to $\frac{20}{XXX}$ in December, 1898. At the same time, it must be remembered that this failing, irritable and irritating eye has been converted into a quiet and stable one capable of affording a very useful degree of vision should a calamity at any time overwhelm its fellow eye. All of this

tends to confirm the favorable *à priori* opinion I had formed of this operation, and which I expressed in reviewing my first case reported in this Journal (October, 1898, page 313).

CASE II.—E. K., a mulatto girl, 22 years of age, of good general appearance, came to the clinic on March 9, 1897, complaining that she was "very near-sighted." Vision, R. E. = $\frac{5}{60}$, L. E. = $\frac{15}{60}$. Javal's instrument shows in R. E., 2 D. ax. 75° , L. E., 2 D. ax. 90° . R. E., — 16 s. \bigcirc — 2 c. ax. $165^\circ = \frac{20}{60}$, L. E., — 16 s. \bigcirc — 2 c. ax. $180^\circ = \frac{20}{60}$. The Ophthalmoscope shows a pronounced posterior staphyloma in each eye. The removal of the right lens is advised. Patient placed in charge of Dr. E. A. Robin, the first assistant surgeon of this department. March 19. Dr. Robin did, under atropine, a small discission with a Knapp's knife-needle. March 20. No reaction, no pain; lens cataractous; atropine.

April 2, 1897. Lens being rapidly absorbed.

May 5, 1897. Under cocaine, thorough discission with a von Graefe knife. May 7. Eye looks well; atropine freely.

June 9, 1897. Very little cortical remaining; needled thoroughly. Capsule seems to be loose in pupil.

July 3, 1897. Large piece of capsule in pupil hanging over into anterior chamber. Advise its removal. July 6. V., R. E. = $\frac{20}{60}$, with + 2.50 s. = $\frac{20}{100}$; L. E. = $\frac{15}{60}$, with glass = $\frac{20}{60}$. July 16. V., R. E. = $\frac{20}{100}$, and no glass improved. Discharged.

There can be no doubt of the great improvement in this case. An eye affected with progressive myopia and posterior staphyloma, to which a — 16 s. \bigcirc — 2 c. could only give a vision of $\frac{20}{60}$, is in four months' time, by an operation causing neither pain nor the loss of a day from the ordinary avocations, brought up to a vision of $\frac{20}{100}$ without any glass—almost double the vision given by the best possible glass before operation. Moreover, we have every reason to believe that we have removed the causes that were acting to produce a gradual but inevitable loss of sight; does the average extraction of the lens for senile cataract, does iridectomy in glaucoma do more? I believe strongly in the future of this operation, though until it shall be well established that no remote ill-effects follow, I should prefer to operate upon one eye. In the three cases upon which I have operated up to this time I have chosen the worse eye of the two.

Here the case of Dr. H. H. Harlan (Atlanta meeting of the American Medical Association, Section on Ophthalmology, [*Jour. Amer. Med. Ass'n.*, June, 1896, p. 184]) should not be forgotten. A woman, 45 years of age, had the misfortune to lose her left eye by progressive myopia. At the age of 13, however, she had had the *good* fortune to have an injury to the right eye, causing traumatic cataract and ultimate absorption of the lens. Thirty-two years afterwards, at the time the vision of the left eye was lost, the sight of the right eye was $20/L$ without any glass and *there was no fundus trouble apparent*. Would an early operation, asked Dr. Harlan, have saved the left eye also? In the light of this case I most firmly believe so.

UNUSUAL CAUSE OF IMPAIRMENT OF VISION.

A mulatto laborer, a large, healthy-looking man, 36 years of age, "got a lick in the right eye about four months ago and has not seen well out of it since." He has small pterygium in each eye and a slight error of refraction, but the vision is $20/XV$ in the left eye and only $20/60$ in the right eye, and no adequate cause for such reduction of vision can be made out. After the right pupil had been dilated to the maximum with atropine, however, by careful examination with the ophthalmoscope and oblique illumination, the cause is discoverable. A long narrow posterior synechia runs in a slightly oblique direction from the upper margin of the pupil to a point slightly above the center of the pupil. This synechia has undergone much cicatricial condensation and contraction, for its middle portion is quite white. The contraction of this cicatricial band has thrown the central portion of the anterior lens-capsule, over an area about corresponding to the normal undilated pupil, into a number of fine horizontal folds, furrows or wrinkles; so that the patient is compelled to see through a medium resembling the clear but fluted glass often placed in doors or windows through which it is desirable to admit light and at the same time exclude the gaze of the curious. The condition was demonstrated to the satisfaction of all the surgeons about the clinic.

DIFFICULTIES IN EXTRACTION OF A TRAUMATIC CATARACT.

L. B., a mulatto servant-girl, 22 years of age, of good general health and appearance, entered the clinic March 23, 1897

She said that about one year ago she had been struck in the left eye with a bunch of flowers, that since that time the pupil had gradually become white, that it gave the eye a queer appearance and somewhat militated against her in obtaining employment, and that she greatly desired to be relieved. Vision, R. E. = $\frac{20}{xx}$, L. E. = l. p. As the left eye had quite a normal appearance save for the mature cataract in the pupillary area, as the light projection seemed good and the tension normal, I consented to attempt extraction, for the purpose of enlarging the binocular field of vision and for cosmetic reasons, provided I was permitted to make a preliminary iridectomy. This was particularly insisted upon, as I had found the pupil not at all dilatable by repeated instillations of a strong solution of atropine.

On March 24, 1897, therefore, under thorough cocaine anæsthesia, a medium-sized iridectomy was made directly upwards, without accident. In performing the operation I thought that I discovered a circular posterior synechia. March 25. Very marked reaction; ordered atropine once or twice daily (to keep the ciliary muscle quiet), and drops of boric acid, borax, and camphor water instilled every hour.

April 6, 1897. All signs of reaction had disappeared.

June 9, 1897. Extraction of the left lens was undertaken under thorough cocaine anæsthesia. A large smooth incision was made in the corneal margin without difficulty, but on attempting to lacerate the anterior capsule I found no cystotome was capable of penetrating it, nor any other knife-like instrument without dislocating the lens. Moreover, the iris was universally adherent to this toughened capsule, thus affording me the area of the coloboma alone to work in. Confronted with the alternatives of abandoning the operation or of pushing the lens back into the vitreous body by too vigorous efforts to get through its capsule, I made use of DeWecker's scissors. The sharp blade of the instrument was pushed through the capsule and by three snips a triangular piece about the size of the coloboma was cut out; this was then picked out of the anterior chamber with iris forceps. The soft lens was now easily delivered leaving the pupil perfectly clear and black. Atropine was instilled, a firm cotton pad and bandage put on, and the patient sent to bed. The bit of capsule removed was found to be about twice the normal thickness and of so elastic

and resistant a nature as to resume its natural shape and curvature when lying free; it reminded one of a bit of rice- or wheat-hulk. June 10. The bandage being removed, the wound was found healed, the injection very moderate. June 11. The eye was doing so well that the patient was allowed to go home. June 22. No injection, the cornea which had been cloudy was clearing nicely. June 28. Practically well. The eye looked quite normal, the disfigurement caused by the white pupil being entirely removed, but the vision was disappointing, fingers could only be counted at about three inches owing to irregular astigmatism and lesions, resulting in optic atrophy, inflicted at the time of the injury.

In regard to my insistence upon preliminary iridectomy in this case, I was influenced by a general principle. My experience has entirely convinced me, as I have stated in this Journal (October, 1898), that this is by far the safest operation. It is certainly the one I should choose for myself were I afflicted with cataract. The coloboma even when but partially covered by the upper lid has not the deleterious effect on vision that we should expect upon purely theoretical considerations. It permits the extraction—the final crucial operation—to be accomplished with great rapidity and with the least amount of manipulation and traumatism to the eye. The healing is usually prompt and entirely uncomplicated by iritis or any more remote untoward sequelæ; the entire absence of bleeding is an advantage and the assured, well-healed coloboma permits rapid and thorough evacuation of all cortical masses and we have seldom to face occlusion or secondary cataract of any density. It has been urged that the patient subjected to preliminary iridectomy shrinks from facing a few weeks later a second and more important operation; such has not been my experience. On the contrary, the imagination of most pictures the ordeal as far more terrible than is the reality; and when assured by a surgeon, in whom they have acquired confidence by his performance of one successful operation, that the painful part (the iridectomy) is all behind them, and that which is to follow is as painless as the trimming of a finger-nail, they mount the table for the final extraction as calmly as one who lies down to quiet slumber—nay, even with eagerness, to be once more restored to sight. Think, too, of the immense advantage we have gained in knowledge, acquired by taking the

first and less important step, of the disposition of the patient, his temperament; docility, possession or lack of self-control; the toleration of the eye or its reaction to surgical interference; the danger, or its absence, of infection from some latent conjunctival or lachrymal trouble, of intra-ocular hæmorrhage; points at which the best of us are liable to be deceived up to the last moment.

That this is true—extraction after preliminary iridectomy is the safest operation—I believe that any fair-minded surgeon can readily convince himself by practicing the method upon a series of cases in the clinic where he has full control of his patients. For it must be admitted that the only draw-back is the semi-occasional loss of some particularly stupid or erratic subject who, in spite of all explanations, expects the iridectomy to improve vision and, disappointed, seeks relief elsewhere. This, however, is much rarer among the intelligent classes of our private clientele. Indeed, the unwarranted rape of a patient upon whom a fellow practitioner has performed a successful preliminary iridectomy should be entirely prevented by professional comity, though not always to be avoided with the migratory hordes that drift about our clinics. To adduce the statistics of some wonderfully skillful and vastly experienced operator and show that he obtains almost unbroken success with even the most difficult of methods is no argument; the question is: What is the safest operation in the great average, all degrees of skill and all possible conditions being considered? To this I believe there can be but one answer: The method with preliminary iridectomy. Now if this be true of ordinary uncomplicated cases, how much more true must it be of complicated cases of traumatic and all pathological cataracts, and how very important in those cases in which one eye has already been destroyed and the unfortunate has but a single chance of restoration to sight. In the latter class it is my invariable practice to prefer the method with preliminary iridectomy.

SKIASCOPE; 1899 MODEL.*

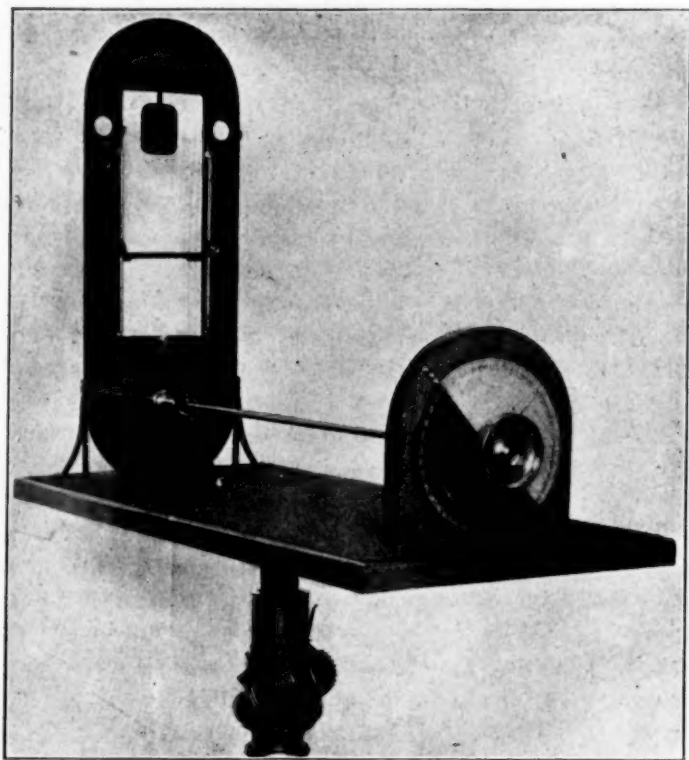
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THROAT HOSPITAL—OPHTHALMIC AND AURAL SURGEON TO THE
ST. LOUIS MULLANPHY HOSPITAL, ETC.

IN the November, 1896, number of THE AMERICAN JOURNAL OF OPHTHALMOLOGY, I described and pictured an improved skiascope which was designed to obviate the fatigue and loss of time occasioned by the constant change of lenses from box to trial-frame in practicing retinoscopy. I also had the pleasure of showing the instrument to the members of this Association at St. Louis, in 1897. Since that time it has been used constantly by myself and others in this country and abroad with great satisfaction. The 1899 model of the skiascope, which I now exhibit, is somewhat different from the first model and represents various improvements suggested by practical experience.

It consists of an upright metal frame 18 inches high and 7 inches wide placed at the end of a table $26\frac{1}{2}$ inches long and 12 inches wide. In the upright frame is an endless groove containing thirty-nine lenses and one open cell. At the lower end of the frame is a strong driving-wheel connected with a horizontal rod running the length of the table to a handle with which the operator rotates the lenses. Facing the operator and close to his hand is a large disc on which is indicated the lens presented at the sight-hole. The white numbers on a black ground represent convex and the black numbers on a white ground concave lenses. The lenses range from 0.25 D. to 9 D. plus, and from 0.25 D. to 9 D. minus. The sight-holes are $\frac{7}{8}$ of an inch in diameter placed about 5 inches from the top of the upright frame. In front of each sight-hole is a cell marked in degrees to hold stronger lenses or cylinders. The central portion of the upright is cut away, leaving a space for the face of the patient. A movable blinder is hung from the top while

*Read at the Fourth Annual Meeting of the Western Ophthalmological and Oto-Laryngological Association, held at New Orleans, La., February 10-11, 1899.

the chin-rest moves up and down on two upright parallel rods and is held in place by a thumb screw. The whole is mounted on a strong adjustable stand, which is raised or lowered by means of a rack and pinion.



The essential advantages of this skiascope are as follows :

1. It saves time and fatigue in changing lenses.
2. It is under the *direct control* of the *operator* and indicates the lens in front of the sight-hole without his getting up.
3. The mechanism is simple, durable and easy to operate.
4. The cornea is accurately centered and the lens perpendicular to the eye (a very important consideration and one not possible with a trial-frame).
5. The instrument is of such a length that the distance of surgeon from patient is always one meter.

URIC ACID AS A FACTOR IN THE CAUSATION
OF CHORIOIDITIS.*

BY RANDOLPH BRUNSON, M.D., HOT SPRINGS, ARK.

IN all my reading and research in this connection I have been greatly impressed with the dearth of written knowledge upon this subject, so I concluded to present to this Association a short paper embodying my experience with this class of cases. Perhaps there is no place in the entire country where the ophthalmologist will see so many cases of chorioiditis, iritis, etc., as may be seen at Hot Springs, Ark., where patients come from every quarter of the globe. It has been a routine practice in every case of chorioiditis to first begin treatment with mercury and the iodides in conjunction with the hot baths. A few years ago, after repeated failures to obtain the anticipated results from such treatment, it occurred to me that there must be some common pathologic factor other than syphilis to cause this disease, and I began to investigate closely and changed my method of treatment, especially in those obscure cases where no positive diagnosis of syphilis could be made, and as a result my efforts towards a cure were in many cases rewarded by a clearing up of the trouble by the use of the salicylates, after the patient had been given, without effect, either by myself or the gentleman who had referred the patient to me, a thorough course of anti-syphilitic treatment. If we will bear in mind the close anatomic relationship between the chorioid and iris, will we be surprised to know that uric acid, if it causes a disturbance in the latter, why it should not in the former?

The second tunic of the eye is formed by the chorioid behind, the iris and ciliary processes in front. The chorioid is the vascular and pigmentary tunic of the eyeball investing the posterior five-sixths of the globe and extending as far forward as the cornea. The middle layer consists of an exceedingly fine capillary plexus formed by the short ciliary vessels. About

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half an inch behind the cornea its meshes become larger and are continuous with those of the ciliary process. The ciliary processes are formed by the plating and folding inwards of the middle and internal layers of the chorioid at its anterior margin and are received between corresponding foldings of the suspensory ligament of the lens, thus establishing a communication between the chorioid and inner tunic of the eye, the larger processes at their periphery being attached to the ciliary ligament, and with the middle and inner layers of the chorioid, their anterior surface is turned towards the back of the iris with the circumference of which it is continuous. The capillary network of the chorioid is the finest and closest in the body. The total area of these capillaries is at least eight hundred times greater than that of the short posterior ciliary arteries from which they arise. In consequence of the law that the velocity of a current in a tube is inverse to its lumen, the velocity of their capillary current must be very many times less than that of the short posterior ciliary arteries. The chorioid presents another peculiar feature, its vessels are arranged in super imposed layers progressively diminishing in size from without inward. In the profound chronic toxæmias, produced by uric acid, the earliest manifestations of the long series of necrobiotic changes are found in the arterioles and capillaries. Here the blood-current is slower than elsewhere and the blood charged with toxic substances is in contact with the delicate structure of these minute vessels much longer than in the larger arteries and veins. Haig, in his admirable work on uric acid, claims that, "if uric acid affects the arteries in the way and to the extent to which it does, it must influence for good or evil the function, nutrition and structure of every tissue and organ of the body from the skin outside to the most central fibers of the spinal cord and brain within."

Free uric acid in the blood does cause contraction of the arterioles, and by this interference with interstitial circulation becomes the prime factor in pathologic changes in every tissue and organ in the body.

Mr. Stanford Morton relates (*Ophthalmic Review*, March, 1890) that he "saw stasis or thrombosis in the vessels of the retina in one or two cases, taking place during an attack of migraine, and there is every probability that these troubles were due to uric acid," and if this can take place in the retina,

why not in the chorioid? Haig sums up one of his brilliant theses as follows: "If my premises are good and my deductions sound, and if uric acid really influences the circulation to the extent which I have been led to believe that it does, it follows that uric acid really dominates the function, nutrition and structures of the human body to an extent which has never yet been dreamed of in our philosophy; and in place of affecting the structure of a few comparatively insignificant fibrous tissues in which it is found after death, it may direct the development, life, history, and final decay and dissolution of every tissue from the most important nerve-centers and the most active glands to the matrix of the nails and the structure of the skin and hair."

In many cases we have associated with chorioiditis of this form typical symptoms of rheumatic iritis also; again, we have the one without the other complication, and upon close observation we find that if the patient has the explosion of uric acid in other parts of the body, the choroid and iris are comparatively free from this trouble until these symptoms have subsided, when we have a recurrent attack of chorioiditis or iritis, or both at the same time. It is not necessarily the case that a well-defined history of rheumatism may be found in order to make the proper diagnosis of the case. If we can discover even any remote symptoms of uric acid after we have eliminated other causes by exclusion, it will guide us in obtaining the line of treatment necessary to perfect a cure.

It frequently happens that no assignable cause can be found for the condition existing in the choroid, the patient does not give a history of rheumatism, yet if uric acid be found and everything else has been due to eradicate this condition of the chorioid and the salicylates are at last administered, the inflammatory process subsides like magic. The changes in the fundus of the eye may be entirely confined to one eye, or may effect both, and be evenly distributed all over the fundus, or confined to a limited area. The uveal pigment and bacillary layer of the overlying retina may become affected also, and hence the term chorio-retinitis is often a more suitable name than simple chorioiditis. Patches of atrophy appear as rounded areas from one-fourth to one disk's diameter, or a little larger, bounded by a ring of black pigment, the entire surface within this ring is white or bluish-white and glistening and shows no

trace of chorioidal vessels or pigment. The appearance of the fundus between the atrophic spots is usually normal. In other places we find similar patches showing very small splashes of pigment on the exposed sclerotic; in other patches again are seen the chorioidal vessels unchanged, or with partial or complete obliteration of the blood streams, from endarteritis, appearing as white or yellowish-white strands. At the diseased spots the outer layers of the retina are always more or less infiltrated with the pigment. These foci of inflammation just as in any other form of the disease, leave the atrophic spots, and thereby interfere with perfect vision. We find on examination of the urine from day to day an increase of uric acid excreted under the influence of the salicylates, hot baths, and a vegetarian diet. It is not necessary to probably weary you with the line of treatment in detail for this class of patients, as any drug which will increase the solubility of uric acid will eliminate the disease through the excretory organs.

I can not refrain, however, from extolling the benefits to be derived from the hot water treatment as given at the Hot Springs of Arkansas in conjunction with other remedies, as in many cases this will alone bring about a decided improvement without the aid of the salicylates. This assertion is founded upon facts. I will close by admonishing you to carefully examine the urine in these puzzling cases of chorioiditis to find the relative proportion of uric acid to urea; and if you do not find it to be 1 to 33 or thereabouts, it will show that the uric acid is not being properly eliminated and in all probability is the cause of the chorioiditis.

A UNIQUE POINT IN REMOVING THE SOFT LENS-MATTER FROM THE CAPSULE IN AN UNRIPE OR OVERRIPE LENS.

BY C. W. CRUMB, M.D., UTICA, N. Y.

A NUMBER of methods have been devised to remove the soft débris, after extracting the hard part of the lens, as for instance, washing out the anterior chamber and lens-capsule, but none has yet proven entirely satisfactory. My objections

to this method are that even with a perfectly aseptic solution it introduces a foreign substance and a certain pressure is exerted on all of the tunics of the eye which one can not well regulate or control. Furthermore, it is attended with some pain, and consumes time, which is important when one is operating with cocaine anæsthesia.

Another method is to leave the soft cortical matter that can not be removed by the scoop or spoon until it becomes opaque, then do the secondary operation of needling. If possible, this secondary operation is to be avoided, and, in my opinion, can be, if the following steps are taken, which I have used in a number of cases with marked success. Let me illustrate by a recent case:

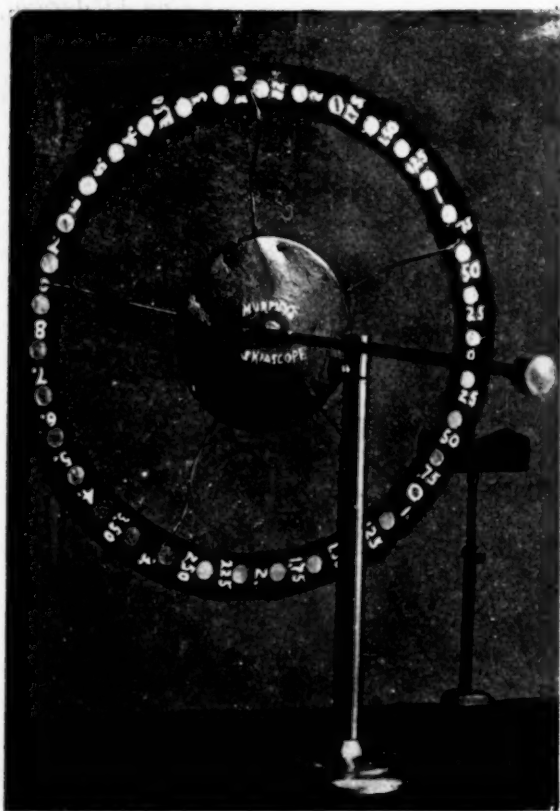
Mrs. M., aged 63 years. Right eye, lens opaque, perception of light only; left eye, lens becoming opaque, counts fingers. Has been in this condition for nearly three years. I sterilized the right eye and extracted the lens by the combined operation. After a linear incision and iridectomy had been made, on opening the lens-capsule the soft lens-matter began to ooze out. Now, instead of pressing on the edge of the wound, tilting the hard part of the lens and expressing it, I simply pressed down on the hard center of the lens-substance, and by so doing displaced the soft lens-matter from the bottom of lens-capsule where it naturally gravitates, so that it had to escape through the opening made in the lens-capsule to remove the lens, and by a series of such of pressures on the hard nucleus I expressed all of the soft lens-substance. Then only I pressed in the usual way on the edge of the incision and with the spoon tilted the hard nucleus and expressed it. This left a clean pupil which has remained clean for several weeks, and I see no reason why it should not continue so indefinitely.

The point I wish to emphasize is that instead of keeping the patients with senile cataracts waiting for years in blindness we can, if the above steps are taken in operating, operate much earlier, for it is in removing the soft lens-matter that the operator experiences the greatest difficulty, and we can realize much better results by expressing the soft lens-matter first, than if we leave it, and try to get a clear pupil afterwards, as is the usual custom.

A NEW SKIASCOPE.

BY F. G. MURPHY, M.D., KANSAS CITY, MO.

SKIASCOPY is generally recognized as being the most accurate method of estimating errors of refraction, though the various kinds of instruments now in use are not free from a few objections.



The hand skiascopes are inconvenient on account of the time required and the difficulty experienced in teaching the patient to properly manipulate them, and for the physician to hold them in position is not satisfactory. The circular skiascopes have been expensive and have the following objections: The inability of the surgeon to readily adjust the instrument

to the slight movements of the patient's eye from the center of the lens, and either moving the patient from one side of the skiascope to the other, or moving the entire instrument to the other side of the patient in examining each eye.

These two objections to the circular skiascopes have been eliminated in this instrument, the photograph of which is here presented. The revolving disk, 22 inches in diameter containing thirty-four lenses, is placed at the end of a horizontal rod which rests on a fulcrum and enables the operator to move the lens in front of the patient's eye in any direction.

The second advantage is, that the instrument is close to the eye when either one is being examined and the instrument does not interfere with the light being placed on either side of the patient's head.

There are seventeen minus and seventeen plus lenses and one marked 0 which contains no lens. Starting with the opening which contains no glass the plus lenses are brought in front of the eye by revolving the disk towards the patient. The minus lenses start from the same point and are distributed in the opposite direction and are brought in front of the eye by turning the disk from the patient.

The skiascope can be raised from twelve to fourteen inches and when once in place can be tilted up and down by pressing down and raising the handle-bar. This movement with the lateral one enables the operator to keep the lens in front of the patient's eye no matter how much he may move about, and also when the lens reflects the light from the mirror the physician can readily change the angle with his left hand which is kept on the handle-bar.

The third improvement is in the chin-rest. The telescope rod has on its lower end a stud and spring which keeps the chin-rest from falling where the set-screw is loosened, and the chin-rest remains in position until the set-screw is made to hold it more firmly for the heavier pressure to be put upon it by the chin. It relieves the operator of the necessity of getting up to adjust the chin-rest or from the awkward attempt to adjust it by leaning over the table with both arms, with the instrument on the table. This device is equally as convenient for the chin-rest of the ophthalmometer.

The instrument is manufactured by Chambers, Inskeep & Co., Manufacturing Opticians, 146 State Street, Chicago.

KERATITIS HERPETICA.*

BY S. L. LEDBETTER, M.D., BIRMINGHAM, ALA.

BEGINNING with the older writers, Scellberg-Wells places all superficial ulcerations under one general head, *e. g.*, "keratitis superficialis." He does not use the word "herpetic" at all. Stellwag devotes more space to "herpetic keratitis" than any other writer, and includes phlyctænular keratitis under that head. He is the only author on my book-shelves who mentions specially an herpetic eruption extending around the circumference of the cornea, a condition most frequently seen in scrofulous persons, or persons suffering from nasal catarrh with eczematous or impetigenous eruptions about the nasal orifices. These, to me, seem the most typical of herpetic troubles, but being on the conjunctival margin, they might be omitted from the list of corneal troubles. They are of short duration and require but little treatment. Juler and Nettleship mention herpes as synonyms of phlyctænule, while DeSchweinitz treats the two as distinct types. Fick treats, at some length, on herpetic keratitis and herpes dendriticus, making the dendritic ulcer a later development of the herpetic vesicle, and hence pathologically the same. If these superficial ulcers, which are classed by different authorities as phlyctænules, superficial corneal ulcers, herpes, and dendritic ulcer, be of the same class and bacteriologically the same, there are clinical differences which would make different types.

I will report three cases which I think illustrate three distinct types:

CASE I.—Mr. W., an attorney, 48-years of age, a man of temperate habits, robust, vigorous constitution, but a hard worker, came to me complaining of a sensation as of something in one of his eyes, with photophobia and excessive lachrymation. There was some conjunctival injection, not much, however, and a small line of infiltrated tissue. A portion looked rough and abraded, while the extremities presented a vesicular appearance. The abrasion resembled that from a slight or superficial wound. The ulceration spread

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slowly, branching off irregularly. While the older portions were healing new vesicles were forming and in turn breaking down. There was a typical dendritic ulcer, and, according to Fick, this would be classed as a vesicular, or herpetic keratitis. The patient was very much run down before a cure was obtained, but there was at no time a febrile condition. Various local remedies were used, with tonic and antiperiodic remedies internally. Nothing seemed to avail anything except curetting and antiseptic washes. The eye recovered after six or seven weeks of constant treatment.

CASE II.—Male, white, 21 years of age; a mechanic who had not been in first-class condition, though apparently strong and robust; had a small corneal ulcer about one-sixteenth of an inch in diameter, quite superficial, which had been in existence several days. The surface was covered by a loose layer of dead tissue when I saw the eye first, something like the appearance from a shallow blister. This was easily removed with a spud. A prescription was given, and the patient was not seen any more for more than a week. The patient said he had gotten along well until the last day or two, when he began having trouble again. I found that the eye was quite irritable, the edges of the ulcer looked rough, and there was another layer of dead tissue on its surface which I curetted away. The eye did well for a while again, and then began to develop small points of infiltration like minute phlyctænules around the border of the original ulcer. This kept up at regular intervals for a number of weeks, the eye always feeling well for several days after curetting and treating one of these little points. Then the photophobia would start up again, and another point would show itself. This condition lasted nearly three months all told, and nothing seemed to do any good except curetting and antiseptic washes, though quite a number of remedies were tried, including tonics and antiperiodics. The patient never had any fever during the course of the trouble. There was but little conjunctival injection at any time, and but little pain.

CASE III.—Male, white, 38 years of age, a coal-miner, with, apparently, a good strong constitution. There was no history of malaria or fever of any kind. The patient had a slight catarrhal affection; there were two or three little irregular looking abrasions coming down from the upper margin of the cornea. At the end of each abrasion there was a small infiltrated point or vesicle. These were curetted and treated. A week later, when the patient came again, the irregular

ulcerations had extended somewhat, branching out like twigs on a limb. At the end of each little furrow was attached a small tab of mucus. There were three or four of these. I thought they were little flakes of loose mucus, but they would not wash away. Each one was attached to the surface of the ulcer by a small pedicle, like so many mucous polyps. The eye was quite sensitive, but after the infiltrated points were curetted and treated, the pain disappeared. The ulcerations lasted about seven or eight weeks altogether. The little polyps had to be removed several different times. The furrows coming from the ulcerated surface, and the nebulous scars which followed, were like those in Case I, but extended differently. From a small area of infected tissue at the upper margin, the disease extended downward, widening as it spread, taking in a triangular-shaped area of the cornea.

These cases present many symptoms in common. They were all superficial, never getting beyond the outer layer of the cornea. They were slow in developing and slow in recovering. There was but little conjunctival injection, no triangular-shaped group of vessels, as is characteristic of phlyctænules, but the photophobia and lachrymation were considerable. There was no history of fever in any of the cases. They all occurred in men who were robust, but at the time of development perhaps not just up to the normal.

Case I answered perfectly the description by DeSchweinitz of keratitis dendritica.

Case II was like DeSchweinitz's description of herpes febrilis.

Case III was more like Case I, being in some points quite different however.

To sum up: Are all dendritic ulcers herpetic? Are all phlyctænules herpetic? Are all superficial ulcers pathologically the same? If they are, there are several different types of the same form of ulcer. I have never seen any of them follow an intermittent fever, as is so common in herpes labialis.

Phlyctænules I find quite common among children with tubercular tendencies. The herpetic eruption around the corneal margin, as described by Stellwag, I find in connection with a form of nasal catarrh.

Cases like these reported by me in this paper are rare in this section, have not been traceable to any constitutional dyscrasia, have not responded readily to constitutional remedies, and to nothing but radical local measures.

MEDICAL SOCIETIES.

PROCEEDINGS OF THE OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

H. R. SWANZY, F.R.C.S.I., President, in the Chair.

THURSDAY, JANUARY 26, 1899.

RAPID CHANGES IN REFRACTION IN CONNECTION WITH DIABETES.

MR. H. GRINSDALE read this paper. A female, aged about 45 years, was first seen on October 7, 1897. She had been always thin and delicate, and had been losing flesh. She had been wearing for near vision R. sph. + 1 D. \ominus cyl. + 2.75 D.; L. sph. + 1.75 D. She had suddenly noticed a change in the power of her sight a few days before her visit; distant objects became dim and near objects became clearer. When seen V. was:

R., $\frac{6}{LX}$ with — 2 D. sph. \ominus — 0.5 D. cyl., $\frac{6}{VI}$;

L., $\frac{6}{LX}$ with — 2 D. sph., $\frac{6}{VI}$.

Result confirmed by shadow test. In the R. lens there were several opacities near the center; the L. lens was clear, but the nucleus in each was marked. No other defect in eyes found. The condition was regarded as early sclerosis of the lens, and glasses for distance were ordered. Dr. Stokes had shortly before discovered a large amount of sugar in her urine (26 gr. to the ounce). The urine had been frequently examined in previous years, and had contained no sugar. After ten days the vision had returned to its former condition, R. $\frac{6}{XVIII}$ w. — 0.5 D. $\frac{6}{XII}$; L. $\frac{6}{VI}$. The right lens showed irregular astigmatism, but the opacities were unaltered. About three weeks later the patient died with diabetic coma. The interest of the case lay in the development of myopia and its rapid disappearance. A similar case was reported by Risley ("Trans. Amer. Ophth. Soc.," 1897), in which disappearance of sugar in dia-

betes was accompanied by development of hyperopia, followed by a return to normal when the sugar reappeared. The case was probably a lenticular one; it was impossible to assume an alteration in position of the retina; it was not likely to be due to spasm of ciliary muscle, as this would have involved a permanent spasm in Risley's case, suddenly giving way and then reappearing.

MR. DOYNE quoted the case of a diabetic man, aged 43 years, whose vision and refraction were H 3 D. V. = $\frac{6}{VI}$. After a voyage vision was $\frac{6}{XII}$, with + 2 D. $\frac{6}{VI}$. The sugar then disappeared under treatment, and vision was emmetropic or H. 0.5.

ON THE STEREOSCOPIC EXAMINATION OF SKIAGRAPHS OF FOREIGN BODIES IN THE EYE AND ORBIT.

MR. MACKENZIE DAVIDSON gave a demonstration of the most recent changes and developments he had made in his method of investigating the presence and position of foreign bodies in the orbit and eyeball. Two negatives were taken, the light being changed in position about 6 cm., the interocular distance. If these were examined side by side against a window, with a little practice in converging the eyes, a miniature stereoscopic picture started into vivid relief, and a fairly accurate estimate could be made of the situation of the foreign body in relation to a known point, such as a piece of lead wire attached to the lower eyelid. The best instrument for seeing stereoscopic skiagraphs was Wheatstone's reflecting stereoscope. If the stereographs were reversed the object, still stood out in perfect relief, but it appeared to be in the other eye; this would not give rise to any confusion, as it would always be known in which eye the foreign body was lying. Mr. Mackenzie Davidson had applied this method of localizing foreign bodies in the eye in seventy cases, and he claimed for it an indispensable position in ophthalmic practice.

MR. SILCOCK spoke of a case in which a foreign body had passed through the cornea and lens, and was located by Mr. Mackenzie Davidson about 6 mm. from the O. D. Under an anæsthetic an incision was made through the sclerotic and the magnet introduced close to the foreign body, which was withdrawn.

MESSRS. ADAMS FROST, JOHNSON, TAYLOR, and CARGILL spoke of cases under their care.

CARD SPECIMENS.

- MR. J. HERN—Obstinate Conjunctivitis.
 MR. D. C. LLOYD OWEN—The Cartella Eye Shield.
 MR. W. H. JESSOP—Skiagraph of Foreign Body in Eye.
 MR. JOHN GRIFFITH—Microscopical Specimen of Primary Sarcoma of the Cornea.
 MAJOR M. T. YARR, R.A.M.C.—Patch of Central Choroido-Retinitis Simulating in appearance the Optic Disc.
 MR. C. HIGGENS—Case of Removal of Lens for High Myopia.
 MR. E. C. FISCHER—Associated movement of Lid and Jaw.
 MR. A. BRONNER—(1) Congenital Tumor of Cornea; Degenerated Nævoid Growth?; (2) Tuberculous Tumor of Iris.—(*British Medical Journal*).

NEWS ITEMS.

Dr. H. V. Würdemann, of Milwaukee, who has been associate editor of the *Annals of Ophthalmology* in charge of the department of German literature, has accepted the position of editor-in chief, vice Dr. Casey A Wood, of Chicago, resigned. Dr. Wood will retain an interest in the *Annals of Ophthalmology* and will remain in charge of the department of Italian literature.

The staff of the *Annals of Ophthalmology* will shortly be enlarged by the appointment of six collaborators. Abstracts of Dutch, Russian, Scandinavian, Polish and Grecian literature will be hereafter included. With these the abstract departments of the journal will cover the ophthalmic literature of all the world. Book reviews and abstracts of foreign literature have generally appeared in the *Annals* several months in advance of other publications, even of journals of foreign countries where the originals were published. The abstract departments are a very valuable feature of the *Annals*, as references to all up-to-date literature are here collated. Hereafter only original papers of first importance or of the most exhaustive type will be accepted for publication in the *Annals of Ophthalmology*.

OBITUARY.

THE LATE DR. WILLIAM H. BAKER.

RESOLUTIONS OF RESPECT TO HIS MEMORY.

At the fourth annual meeting of the Western Ophthalmological and Oto-Laryngological Association, held in New Orleans, La., February 10 and 11, 1899, the following resolutions were passed:

This Association has heard, with profound regret, of the sudden and unexpected death of Dr. William H. Baker, of Lynchburg, Va., an active member of this Association. In 1897 he attended the meeting in St. Louis, and read a paper entitled, "Mental Depression and Prolonged Melancholia Following Graduated Tenotomy and the Limitation of Prisms." He had promised a paper to be read at this meeting. Notwithstanding the constant and pressing engagements of extensive practice, he traveled far to attend these meetings, and was a frequent participant in the discussions.

Dr. Baker was born in Winchester, September 16, 1857. He attended Roanoke College at Salem, from which he graduated, and which not long since conferred upon him the degree of A. M. He pursued his studies in medicine at the University of Maryland, and Johns Hopkins University, and the special studies of the eye, ear and throat with Dr. Julian J. Chisolm, of Baltimore. He had recently returned from Europe where he had been studying and observing clinics. He brought to the active practice of medicine a splendid and valuable store of knowledge, measureless industry and boundless energy, qualities which soon won for him the confidence and esteem of every one who came within the sphere of his influence. Doctors in Lynchburg, collectively and individually, regarded his residence there as of inestimable value to their practice and of utmost importance to the people, for it was generally appreciated that where Dr. Baker practiced no necessity existed for patients to go to distant place to have special treatment.

It was not alone in his work as a physician that Dr. Baker won the favor and esteem of the people in Lynchburg. In social, religious and literary life of the city he was at all times a useful and important factor. His traits of character rendered him distinctly aggressive and progressive. In the school board of which he had been for several years a valued member, he occupied a prominent position, seeking in every way he could to elevate and broaden the educational work of the free-school system. Dr. Baker had resided in Lynchburg for about fifteen years. He married Miss Eliza Deane, who survives him with two children, a daughter and a son.

Being therefore desirous of expressing and placing on record our sense of the calamity which has fallen upon us in the loss of our distinguished friend:

Resolved, That the name of William H. Baker will ever be identified with the Association as one of its early members and most interested supporters.

Resolved, That in the death of our lamented brother the medical profession has lost a most able, eminent and loyal member, and his community a public support and most reliable citizen, and society one of its highest types of moral character.

Resolved, That words are inadequate to express our sorrow, that we can no longer in this work enjoy his professional companionship, and profit by his counsels.

Resolved, That we sympathize most deeply with the family of our late member in the bereavement with which it has pleased Divine Providence to afflict them.

Resolved, That a copy of these resolutions be sent to the family.

W. E. DRIVER, M.D.,	} Committee.
ADOLF ALT, M.D.,	
B. E. FRYER, M.D.,	

PAMPHLETS RECEIVED.

"Surgery of the Lung," by J. B. Murphy, M.D.

"Cylindrical Transposition," by N. B. Jenkins, M.D.

"Annual Report of the Lutheran Hospital," St. Louis, Mo.

"The Serum Treatment of Diphtheria," by W. Cheatham, M.D.

"Clinical Report From the Winyah Sanitarium," by K. von Ruck, M.D.

"The Human Eye a Defective Optical Instrument," by A. R. Baker, M.D.

"The Teaching of Physiology in Medical Schools," by W. T. Porter, M.D.

"The Use of Nosophene and Antinosine in Surgery," by C. A. Dundore, M.D.

"The Treatment of Chronic Suppurative Otitis Media," by N. H. Pierce, M.D.

"Schott Treatment of Chronic Heart Disease," by Elsworth Smith, Jr., M.D.

"Surgery in Obstinate Neuralgia of the Mastoid Region," by Robert Sattler, M.D.

"Mastoidectomy, Involving Lateral Sinus Complications," by J. O. Stillson, M.D.

"Thirtieth Annual Report of the Brooklyn Eye and Ear Hospital." January, 1899.

"Antinosine in the Treatment of Diseases of the Eye and Ear," by W. F. Coleman, M.D.

"Seventy-Third Annual Report of the Massachusetts Charitable Eye and Ear Infirmary."

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"Bilateral Paralysis of the Posterior Cricoarytoid Muscles of the Larynx, With Report of a Case," by A. R. Baker, M.D.

"Protargol as a Substitute for Nitrate of Silver in Ophthalmia Neonatorum and Other Conjunctival Diseases," by F. E. Cheney, M.D.

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